Examples of Class 5:

(a) Dominion Power and Transmission Company from Niagara River and Old Welland Canal near St. Catharines.

(b) Provincial Light and Power Company, from Soulanges Canal at foot of Cedars Rapids.

(c) Various powers from Lachine Canal near Montreal.

(d) Cornwall Canal, near Iroquois, Ont.

(e) Canadian Light and Power Company, abandoned old Beauharnois Canal, near St. Timothee, Que.

#### BRIEF DESCRIPTION OF THE ABOVE POWERS

#### Class 1a—Queenstown-Chippawa Power Development

Authorized 1917-1921. Twelve and a half miles of artificial waterway, diverting water from Grace Island Pool, Niagara River, above Niagara Falls, through four and a half miles of the Welland River reversed in flow, then through about eight miles of canal to Queenston, where the water is returned to the Niagara River.

#### Class 1b—Dominion Power and Transmission Company

The water is taken from the Niagara River and the old Welland Canal through a series of artificial pools or lakes across the Niagara Peninsula and discharges over the escarpment near St. Catharines into Twelve-Mile Creek and then into the Niagara River above Lake Ontario.

#### Class 1c-Great Lakes Power Company, Sault Ste. Marie

This development takes water from Lake Superior above St. Marys Rapids through a side canal and waterway and discharges into St. Marys River at almost the level of Lake Huron, a total length of diversion of between one and two miles.

# Class 1d-Ontario Hydro, Nipigon River

The Ontario Hydro built a dam across the river at Cameron Falls and diverted the whole flow through a side canal and tail race on one side of the river, approximately one half mile long.

# Class 1e-Alcoa Power Company, Saguenay River, Chute a Caron

The Alcoa Power Company is now constructing a large diversion canal from Chute a Caron on the Saguenay River across country to the Shipsaw River and thence back to the Saguenay, the total length believed to be between four and a half and five miles.

# Class 2a-Ontario Power Company, Niagara Falls

The Ontario Power Company takes water from the Niagara River above the Falls through a series of pipe lines from thirteen and a half to eighteen feet in diameter and discharges the water below the Falls, the total length of diversion being about one and a half miles.

### Class 2b—International Paper Company, Grand Falls, St. John River, N.B.

The diversion is made by means of a tunnel through rock cutting across a point underneath the town of Grand Falls, N.B., the length of about one-half mile.